7

Financial Resources and Transfer of Technology

The United States is committed to assisting developing countries in their efforts to mitigate and adapt to climate change. Since the period covered by the *U.S. Climate Action Report 2010* (2010 CAR) (U.S. DOS 2010), the United States has significantly ramped up its provision of climate finance. Climate change has become a major thrust of U.S. diplomatic and development assistance efforts and has been integrated into the core operations of all major U.S. foreign assistance agencies.

The United States is using the full range of institutions—bilateral, multilateral, development finance, and export credit—to mobilize private finance and invest strategically in building lasting resilience to unavoidable climate impacts; to reduce emissions from deforestation and land degradation; and to support low-carbon development strategies and the transition to a sustainable, clean energy economy. The United States is working to ensure that its capacity-building and investment support is efficient, effective, innovative, based on country-owned plans, and focused on achieving measurable results with a long-term view toward economic and environmental sustainability.

Climate change has become a major focus of U.S. diplomatic and development objectives through a series of significant policy directives. The 2010 Presidential Policy Directive on Global Development[1] identified the Global Climate Change Initiative (GCCI) as one of three priority U.S. development initiatives.[2] GCCI provides a platform upon which the United States builds climate change considerations into its foreign assistance operations. The 2010 U.S. *First Quadrennial Diplomacy and Development Review* also identified climate change as one of the main pillars of U.S. diplomacy and international development (U.S. DOS and USAID 2010). The 2012 U.S. Agency for International Development (USAID) *Climate Change and Development Strategy* sets out principles, objectives, and priorities for USAID climate change assistance from 2012 through 2016 (USAID 2012). This strategy prioritizes not only clean energy, sustainable landscapes, and adaptation, but also integration: factoring climate change knowledge and practice into all USAID programs to ensure all sector portfolios are climate resilient and, where possible, reduce greenhouse gas (GHG) emissions.

In addition, the Overseas Private Investment Corporation (OPIC) has adjusted its policies to shift its international investments into climate-friendly activities. As the U.S. government's development finance institution, OPIC mobilizes private capital toward development challenges, and in doing so contributes to U.S. development and foreign policy objectives. OPIC has pledged to reduce GHG emissions associated with its investments by 30 percent by 2018 and by 50 percent by 2023, and to promote clean energy and energy efficiency investments. OPIC has dramatically expanded its commitments to renewable resources, up 30-fold since 2007. OPIC has also introduced new tools for developing-country investors, such as direct financing for energy efficiency improvements; insurance against regulatory changes, such as cuts in renewable energy feed-in tariffs; and protection against government interference in the use of carbon credits.

The United States remains committed to supporting multilateral climate change and environment funds, including the Climate Investment Funds (CIFs) and the Global Environment Facility (GEF). The United States has pledged $2 billion to the CIFs, and to date has contributed

[1] Fact Sheet: U.S. Global Development Policy. *See* http://www.whitehouse.gov/the-press-office/2010/09/22/fact-sheet-us-global-development-policy.

[2] Foreign Assistance Initiatives. *See* http://foreignassistance.gov/InitiativeLanding.aspx.

$1.137 billion. For the GEF's fifth replenishment (GEF-5) for fiscal years (FYs) 2011–2014, the United States has pledged $575 million, an increase of more than 50 percent from the U.S. GEF-4 pledge.

In FY 2010, the United States made its first contributions to the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). The United States is now one of the largest donors to these multilateral adaptation funds, having contributed $120 million between FYs 2010 and 2012. The United States has supported the development of the Green Climate Fund (GCF) since the concept was first proposed, has actively participated on the Transitional Committee that negotiated the GCF Governing Instrument, and remains committed to helping operationalize an effective and efficient GCF as a member of its Board.

At the 15th Conference of the Parties (COP-15) to the United Nations Framework Convention on Climate Change (UNFCCC) in Copenhagen, the United States committed to working with other developed countries to collectively provide resources approaching $30 billion in "fast start" finance (FSF) during the period 2010–2012 to support developing countries in their mitigation and adaptation efforts. In conjunction with other developed country Parties to the UNFCCC, the United States also agreed to the goal of collectively mobilizing $100 billion per year in climate finance by 2020, from a wide variety of public and private sources, to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation.

As noted in Decision 1 of COP-18 in Doha, developed country Parties successfully achieved the FSF goal (UNFCCC 2013). U.S. climate finance was $7.5 billion[3] from FYs 2010 through 2012, and reached more than 120 countries through bilateral and multilateral channels, meeting the President's commitment to provide America's fair share of the collective pledge.[4] This $7.5 billion consists of more than $4.7 billion of congressionally appropriated assistance, more than $1.9 billion of development finance, and $749 million of export credit. The $4.7 billion in appropriated assistance represents a fourfold increase in annual climate assistance since 2009, with a ninefold increase in adaptation assistance.

This chapter provides details on U.S. climate finance by channels and instruments, thematic pillar, and region; describes U.S. efforts to mobilize private climate finance; and illustrates examples of U.S. contributions to capacity building and transfer of technology.

CHANNELS AND INSTRUMENTS

U.S. climate finance is provided through several different channels that can broadly be grouped into three categories: (1) congressionally appropriated finance, delivered through both bilateral and multilateral channels; (2) development finance, delivered through OPIC; and (3) export credit, delivered through the U.S. Export-Import Bank (Ex-Im).

Congressionally Appropriated Assistance

The United States provides congressionally appropriated, climate change-dedicated, grant-based assistance via the GCCI, as well as additional congressionally appropriated grant-based assistance that delivers climate co-benefits. This assistance is delivered through both bilateral and multilateral channels.

Bilateral Climate Finance

Grant-based U.S. bilateral climate assistance is programmed directly through bilateral, regional, and global programs. These programs are principally supported by USAID, and also through the U.S. Department of State (DOS), Millennium Challenge Corporation (MCC), and other U.S. government agencies.[5] Allocation decisions for each program are made by the administering U.S. government agency. Dedicated U.S. climate assistance is targeted to help the most vulnerable countries adapt to climate change impacts, and countries with significant opportunities to mitigate their GHG emissions (Box 7-1).

Multilateral Climate Finance

Multilateral climate change funds feature institutional structures governed jointly by developed and developing countries, and play an important role in promoting a coordinated, global response to climate change. U.S. contributions to multilateral climate funds—channeled through the U.S. Department of the Treasury and DOS—leverage funding from other

[3] The totals reported here reflect slight revisions to previously reported levels, based on updated information received since the release of the November 2012 Fast Start Finance (FSF) report (U.S. DOS 2012).

[4] While the U.S. FSF reports use the term "provided" to describe U.S. support, the term "committed" is used in this report to be consistent with the new Biennial Report Common Tabular Format guidelines, and to be consistent with the terminology used in the *Biennial Report* and the *Sixth National Communication*. For further information related to U.S. methodologies, *see* http://www.state.gov/e/oes/rls/rpts/car6/index.htm.

[5] In counting and aggregating climate finance, the United States includes programs that have a primary mitigation and/or adaptation purpose, as well as activities with significant climate co-benefits (e.g., relevant biodiversity and food security activities). In the case of programs for which only part of the activity is targeted toward a climate objective, only the relevant financial support is counted, rather than the entire program budget. (For more information, *see* the *Biennial Report* and associated documentation at http://www.state.gov/e/oes/rls/rpts/car6/index.htm.

Box 7-1 **Millennium Challenge Corporation**

The Millennium Challenge Corporation (MCC) was founded in 2004 with a focused mandate to reduce poverty through economic growth. Two of MCC's founding principles are country ownership and a focus on results. These principles lead MCC to support investments that reflect countries' own priorities for poverty reduction, and offer the most promise for returns in terms of increased incomes.

The United States recognizes that people's livelihoods and well-being depend on reliable and equitable access to natural resources. Toward this end, the United States will help partner countries strengthen their capacity to preserve and enhance ecosystem functions and natural wealth that are vital to achieving long-term poverty reduction and development outcomes, and will help communities build resilience to environmental stressors, such as climate change, water scarcity, and natural disasters. Among other approaches, these goals are achieved by incorporating cost-effective, technically, and economically viable, measures into projects that can promote energy efficiency, improve water resource management, support less carbon-intensive land-use practices, improve institutional capacity for environmental management, and help protect worker and public health and safety.

For example, in an effort to increase the incomes of Indonesia's poor in targeted districts, the MCC-funded $332.5 million Green Prosperity Project will provide commercial and grant financing to help mobilize greater private-sector investment in renewable energy and sustainable land-use practices. This project will also provide technical assistance to support project preparation, improve land-use planning, and strengthen local and regional capacity to pursue low-carbon development.

governments, development partners, and the private sector to enable large-scale infrastructure investments with a range of tailored financial products across a wide range of countries. As with bilateral finance, U.S. contributions to multilateral climate funds are allocated to adaptation, clean energy, and sustainable landscape activities.

During FY 2010–2012, U.S. multilateral climate change finance amounted to $1.2 billion. This total includes the CIFs (which include the Clean Technology Fund, the Forest Investment Program, the Pilot Program for Climate Resilience, and the Scaling-Up Renewable Energy Program in Low-Income Countries), the GEF, the LDCF, the SCCF, and the Forest Carbon Partnership Facility.

Development Finance and Export Credit

OPIC and Ex-Im play a critical role by using public funds to mobilize much larger sums of private investment directed at mitigation through loans, loan guarantees, and insurance in developing countries.

Table 7-1 summarizes U.S. climate finance by channel. Tables 7-3 through 7-6 at the end of this chapter present climate-related U.S. financial contributions to the GEF, overall

Table 7-1 **U.S. Climate Finance by Channel** (in US$ millions)[a]

U.S. climate finance was $7.5 billion during fiscal years 2010, 2011, and 2012, and reached more than 120 countries through bilateral and multilateral channels. The $4.7 billion in appropriated assistance represents a fourfold increase in annual climate assistance since 2009, and a ninefold increase in adaptation assistance.

Channel	2010	2011	2012	Total
Congressionally Appropriated Assistance (USAID, State, Treasury, MCC, and other U.S. agencies)	$1,587.9	$1,884.1	$1,261.7	$4,733.7
Development Finance (OPIC)[b]	$155.1	$1,114.8	$721.6	$1,991.5
Export Credit (Ex-Im)	$253.2	$194.7	$301.2	$749.1
Total	**$1,996.2**	**$3,193.6**	**$2,284.5**	**$7,474.3**

[a] These numbers do not include private investment leveraged.

[b] These figures include only OPIC projects related to climate change, and are therefore counted under fast start finance (FSF). However, OPIC's renewable resources portfolio (renewable energy, sustainable water, and agriculture) totals exceed the FSF-eligible totals being reported here. OPIC figures in this document reflect commitments made in the specified year and do not take into account any cancellations that may occur in subsequent years.

Note: Ex-Im = Export-Import Bank of the United States; GHG = greenhouse gas; MCC = Millennium Challenge Corporation; OPIC = Overseas Private Investment Corporation; USAID = U.S. Agency for International Development

contributions to multilateral institutions, and bilateral and regional contributions related to the implementation of the UNFCCC.

CLIMATE FINANCE BY THEMATIC PILLAR

U.S. climate finance falls under three thematic pillars: adaptation, clean energy, and sustainable landscapes, the last of which focuses largely on helping countries to slow, halt, and reverse deforestation and related GHG emissions (primarily through reducing emissions from deforestation and forest degradation, or REDD+). The latter two pillars are often described jointly as mitigation.

Adaptation—Promoting Climate Resilience

For adaptation, dedicated U.S. climate assistance prioritizes countries, regions, and populations that are highly vulnerable to climate change impacts. By increasing resilience in key sectors, such as food and water security, coastal management, and public health, U.S. programs help vulnerable countries prepare for and respond to increasing climate- and weather-related risks. Assistance identifies and disseminates adaptive strategies, makes accessible the best available projected climate change impact and weather data to counterparts, and builds the capacity of partner governments and civil society partners to respond to climate change risks.

Sample Activities: Adaptation

SERVIR[6]—Globally, USAID and the National Aeronautics and Space Administration (NASA) have provided more than $41 million from FY 2010 through 2013, to increase the application of satellite data, ground-based observations, and forecasts directly tailored to the needs of decision makers to help them avoid climate-related hazards and improve development outcomes. SERVIR partners with international institutions in Central America, Eastern and Southern Africa, and the Hindu Kush-Himalaya region to reach governmental and other key decision makers. It also provides a Web-based platform to improve open access to satellite information, imagery, and other decision-support tools to inform agriculture, water, energy, health, forest and land planning and management, ecotourism, and disaster preparedness and response, among other areas. SERVIR has leveraged approximately $1 million in private-sector resources and services, including hardware, software, and wireless services from partners, including Cable and Wireless, ESRI, and Google.

FEWS NET—USAID, working with the U.S. Geological Survey (USGS), NASA, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Department of Agriculture (USDA), is investing more than $13 million annually for FYs 2010–2013 to support the Famine Early Warning Systems Network. FEWS NET provides information and early warning on seasonal climate patterns and challenges to food and water security in communities vulnerable to climate variability and change; monitors agriculture, climate, and market data; and helps decision makers anticipate and respond to food insecurity. This and other efforts are transforming the ability of developing countries to use science to improve their decision-making processes and strategies.

R4 Rural Resilience Initiative—USAID is piloting new approaches to insurance to help poor farmers manage weather risks. In Senegal, for example, USAID is investing $8 million in the R4 Rural Resilience Initiative, which will overcome cash constraints by enabling the poorest farmers to pay for their insurance with their labor by working extra days on community risk reduction projects, such as improved irrigation or soil management. USAID is also supporting the expansion of an index-based livestock insurance program from Kenya to Ethiopia to help protect herding families from losses due to severe drought. This initiative has leveraged $1.2 million in private investment and expertise from global re-insurer Swiss Re.

C-CAP—In the Pacific Islands region, USAID is supporting a five-year, $23.6 million Coastal Community Adaptation Program (C-CAP) to help reduce the vulnerability of coastal communities to the impacts of climate change. C-CAP is building local capacity for disaster risk reduction and preparedness, and integrating climate-resilient policies and practices into long-term land-use plans and building standards. The program is expected to benefit approximately 90 communities in up to 12 Pacific Island nations.

PPCR—During FYs 2010–2012, the United States contributed $84 million to the Pilot Program for Climate Resilience (PPCR), which works to increase resilience and protect vulnerable

[6] SERVIR is a Spanish language acronym for Regional Visualization and Monitoring System.

populations in 18 countries. The PPCR is providing funds to help six Caribbean countries improve disaster management in response to devastating hurricanes and flooding. PPCR funding will help save thousands of lives and avoid billions of dollars in economic losses through improved planning and weather forecasting.

Mitigation—Accelerating Growth and Supporting Transitions to Low-Carbon Economies

Clean Energy

For clean energy, dedicated U.S. climate assistance focuses on countries and sectors offering significant emission reduction potential over the long term, as well as countries that offer the potential to demonstrate leadership in sustained, large-scale deployment of clean energy. In terms of sector coverage, clean energy includes renewable energy and energy efficiency and excludes natural gas and other fossil fuel power plant retrofits. The United States also supports regional energy programs that improve the enabling environments for regional energy grids to distribute clean energy, as well as global programs that focus chiefly on information sharing and building coalitions for action on clean energy technologies and practices.

Although climate finance generally refers to investing in low-carbon infrastructure, it is equally important from a climate impact point of view to address financing for high-carbon forms of energy. In June 2013, President Obama called for an end to U.S. government support for public financing of new coal power plants overseas, except for (1) the most efficient coal technology available in the world's poorest countries in cases where no other economically feasible alternatives exist, or (2) facilities deploying carbon capture and sequestration technologies (EOP 2013a). As part of this new commitment, the United States is working to secure the agreement of other countries, export credit agencies, development finance institutions, and multilateral development banks to adopt similar policies as soon as possible.

In September 2013, the leaders of Denmark, Finland, Iceland, Norway, and Sweden joined the United States in ending public financing for new coal-fired power plants overseas, except in rare circumstances, and the United Kingdom announced a similar commitment in November 2013. The United States also welcomes the decisions made by the World Bank and the European Investment Bank to adopt similar policies. Furthermore, the United States remains committed to phasing out subsidies that encourage wasteful consumption of fossil fuels. President Obama is calling for the elimination of U.S. fossil fuel tax subsidies in his FY 2014 budget, and the United States will continue to collaborate with partners around the world toward this goal (EOP 2013a).

Sample Initiatives: Clean Energy

AIP—During FYs 2010–2012, USAID invested more than $15 million in the Africa Infrastructure Program (AIP) to provide clean energy capacity-building and transaction advisory assistance across sub-Saharan Africa. AIP is helping partner governments and agencies in African countries to plan and implement the key institutional, legal, commercial, and regulatory reforms that are needed to attract private investment in clean energy. AIP also provides specific technical assistance and advisory services to support governments in evaluating and negotiating clean energy projects.

Ex-Im Support—Ex-Im committed $749.1 million to support renewable energy exports to developing countries during FYs 2010–2012. These authorizations were made in the form of loans, financial guarantees, and export credit insurance policies. This financing will establish more than 850 megawatts (MW) of clean electricity generation capacity, mainly from new solar power plants and wind energy farms. For example, Ex-Im provided a $48.6 million loan to support the Novo Gramacho biogas project in Brazil. The funding will support the export of proprietary biogas cleaning technology. Additionally, Ex-Im has provided substantial support for solar energy in India. Estimates are that Ex-Im financed more than 30 percent of the projects allocated under National Solar Mission in India, under Phase 1, which recently concluded.

OPIC Support—During FYs 2010–2012, OPIC committed $1,991.5 million in climate change financing support, predominately for clean energy projects. The wide variety of clean energy projects OPIC supported in 2012 illustrate the breadth of its work, which covers a range of project sizes and structures. OPIC's FY 2012 projects include a $16.7 million loan to develop a

new 12-MW biomass power plant in Pakistan, which will be the first renewable energy biomass plant to supply power to the national grid, and $250 million in financing to support the construction of a solar power plant in an underdeveloped region of South Africa.

SEAD, CESC, Global LEAP—As part of the Clean Energy Ministerial process, the U.S. Department of Energy (DOE) is implementing a range of programs aimed at expanding the use of energy efficiency and renewable energy technologies.

The Super-Efficient Equipment and Appliance Deployment (SEAD) initiative supports the acceleration of global energy efficiency gains for internationally traded equipment and appliances by pulling super-efficient appliances and equipment into the market through cooperation on incentives, procurement, awards, and research and development (R&D) investments, and by bolstering national or regional minimum efficiency standards.

The Clean Energy Solutions Center (CESC) is a Web-based, knowledge-sharing platform that aims to help governments design and adopt policies and programs that support the deployment of low-carbon technologies.

The Global Lighting and Energy Access Partnership (Global LEAP, formerly known as the Solar and LED Energy Access initiative, or SLED) is developing a global quality assurance program for off-grid lighting products and small solar kits for rural electrification. Global LEAP also is supporting the expansion of the Lighting Africa activities spearheaded by the World Bank Group to new regions, including India. At COP-15 in Copenhagen, the United States announced its intent to contribute $35 million over five years to these programs as part of the Climate Renewables and Efficiency Deployment Initiative.

Power Africa —Power Africa is a new initiative to double access to power in sub-Saharan Africa. More than two-thirds of the population of sub-Saharan Africa is without electricity, and more than 85 percent of people living in rural areas lack access. Power Africa will build on Africa's enormous power potential, including the potential to develop clean geothermal, hydro, wind, and solar energy. This initiative will help countries develop newly discovered resources responsibly, build out power generation and transmission, and expand the reach of mini-grid and off-grid solutions.

CTF—The United States contributed $714.6 million during FYs 2010–2012 to support the critical work of the Clean Technology Fund. The CTF catalyzes clean energy investments in emerging economies with rapidly growing emissions by helping countries achieve access to renewable energy, green growth, and energy efficiency in transport, industry, and agriculture. The CTF is working with 18 countries on projects, such as wind power in Egypt, sustainable urban transportation in the Philippines, and energy efficiency in Turkey. The funds are channeled toward projects that focus on scaling up proven technologies, thereby promoting new markets for maximum impact. To date, the CTF has approved 41 projects for a total of $2.3 billion. These funds have leveraged $18.8 billion in co-financing, including $5.8 billion from the multilateral development banks and $13 billion from other sources, and have contributed to reducing 525 teragrams of carbon dioxide equivalent (Tg CO_2e) emissions—the equivalent of taking 99 million cars off the road for a year.

SREP—During FYs 2010–2012, the United States contributed $28 million to the Scaling-up Renewable Energy Program (SREP), which is working to expand energy access in eight countries. To date, approved projects in Kenya, Nepal, and Honduras are using $46 million in SREP funds to leverage $562 million in co-financing and build 250 MW of sustainable energy capacity. The Maldives will use SREP funds to increase renewable energy production from 1 percent of power generated to 16 percent. The SREP projects will supply energy that is cleaner and 10–20 percent cheaper than diesel-generated power, and help the Maldives government save at least $7 million in fuel subsidies per year.

ENERGY STAR—The U.S. Environmental Protection Agency's ENERGY STAR program has arrangements with agencies in several other countries, allowing them to implement ENERGY STAR for a variety of products and building types. These bilateral agreements on products delineate program responsibilities to promote, monitor, and enforce ENERGY STAR in their markets. Most of these product partnerships are limited to office equipment because of the

global nature of the products. All of these international efforts allow ENERGY STAR to work closely with other government agencies and stakeholders to harmonize test procedures and specification levels, where appropriate.

PACE—Launched in 2009, the U.S.–India Partnership to Advance Clean Energy (PACE) focuses on spurring low-carbon inclusive development by supporting R&D of clean energy. Since PACE's launch, the U.S. government has mobilized about $2 billion in public and private resources for clean energy projects in India. In addition, the United States and India have launched a $125 million Joint Clean Energy Research and Development Center, which includes pledges of $25 million from the U.S. and Indian governments and an additional $75 million in matching private funds.

Sustainable Landscapes

For activities related to land-use-related mitigation (or "sustainable landscapes"), including REDD+, dedicated U.S. climate change assistance works to combat unsustainable forest clearing (for example, for agriculture and illegal logging), and is helping ensure good governance at local and national levels to support the sustainable management of forests. U.S. support prioritizes mitigation potential; countries with the political will to implement large-scale efforts to reduce emissions from deforestation, forest degradation, and other land-use activities; and potential for investments in monitoring, reporting, and verification of forest cover and GHG emission reductions. The United States also provides multilateral funding to support all three phases of REDD+, from readiness (Phase 1) through strategy implementation (Phase 2), to payment for results (Phase 3).

Sample Initiatives: Land-Use-Related Mitigation

FCPF, FIP—The United States funds the Readiness Fund of the Forest Carbon Partnership Facility (FCPF), which supports 36 developing countries in preparing strategies and programs, as well as engaging stakeholders, to advance REDD+. The United States also funds the Forest Investment Program (FIP), which supports efforts to strengthen forest governance and institutional capacity, as well as measures to reduce drivers of deforestation outside the forest sector in eight countries. U.S. funding for the FCPF Carbon Fund helps pilot an international results-based system that will reward progress made in reducing deforestation and the associated emissions. Together the FCPF and FIP have contributed to advancing global knowledge and technical approaches to REDD+, as well as supporting the strategies and programs that will lead to increased forest protection, reduced GHG emissions, and the many other benefits provided by healthy, intact tropical forests.

SilvaCarbon—The interagency SilvaCarbon program is an effort to build the capacity of selected countries in Africa, South America, and Southeast Asia to use forest and terrestrial carbon measurement and monitoring tools and technologies, and demonstrate and compare related methodologies. The program is supported by $8 million from DOS and $12 million from USAID, as well as funding from the participating technical agencies.

CARPE—USAID's landmark Central Africa Regional Program for the Environment (CARPE) is now transitioning into its third phase with a $13.6 million investment from USAID. The third phase of CARPE will include two major components: the Central Africa Forest Ecosystems Conservation (CAFEC) program and the Environmental Monitoring and Policy Support (EMAPS) program. CAFEC promotes responsible management of tropical forests. EMAPS strengthens central African nations' capacity to better govern their natural resources, develop new scientific methods to monitor changes to forests, and manage natural resources in a way that strengthens biodiversity and reduces landscape-related GHG emissions.

Forging International Partnerships

The United States is a strong supporter of partnerships and coalitions focused on practical action to address the drivers of climate change (Box 7-2).

Sample Initiatives: Forging International Partnerships

GMI—Formerly known as the Methane to Markets Partnership, the Global Methane Initiative (GMI) aims to reduce methane emissions and advance the abatement, recovery, and use of

Box 7-2 **Climate and Clean Air Coalition**

DOS invested $12.5 million in the Climate and Clean Air Coalition. Launched in 2012, this voluntary, collaborative global partnership unites governments, intergovernmental organizations, the private sector, and civil society to quickly reduce short-lived climate pollutants (SLCPs), such as methane, black carbon, and many hydrofluorocarbons (HFCs). According to a United Nations Environment Programme/World Meteorological Organization study aggressive action on these pollutants could avert 0.5°C (0.9°F) of warming by 2050, while preventing more than two million premature deaths each year and avoiding more than 30 million tons of annual crop losses by 2030 (UNEP and WMO 2011).

The Coalition focuses high-level attention on this issue to help catalyze major reductions of SLCPs. These actions can be undertaken now using current technologies. Major efforts include reducing methane and black carbon from waste and landfills; avoiding methane leakage, venting, and flaring from oil and gas production; phasing down HFCs through new technologies; and addressing black carbon from brick kilns, cookstoves, and diesel engines.

Since its launch in February 2012, the Coalition has rapidly grown from six country partners to 32, and has brought on leading international organizations, including UNEP, the World Bank, and the United Nations Development Programme, with more than 60 total international partners. In less than 18 months, the Coalition has attracted more than $40 million in funding support and has launched nine action-oriented initiatives to reduce SLCPs.

methane as a valuable clean energy source. GMI achieves this by creating an international network to build capacity, develop strategies and markets, and remove barriers to methane reduction project development in partner countries.

The United States has been a strong leader of GMI. U.S. contributions of $74.4 million through FY 2012 have mobilized more than $465 million in investment from other partner countries, development banks, the private sector, and members of the GMI Project Network. Under the GMI, the United States has cumulatively provided technical, financial, or capacity-building support to several hundred global projects. U.S. activities contributed to the reduction of methane emissions by approximately 30 Tg CO_2e in 2011 alone; cumulative emission reductions exceed 160 Tg CO_2e.

LEDS GP—DOS is investing $2 million in the Low Emission Development Strategies Global Partnership (LEDS GP). Through workshops and collaboration on a wide range of topics, the LEDS GP has brought together more than 100 countries, more than 100 institutions, and more than 700 LEDS practitioners to engage in peer learning and training on low-emission development. The partnership operates three regional platforms for cooperation, one each in Asia, Latin America, and Africa. In 2013, the LEDS GP will focus on building capacity on financing LEDS, connecting LEDS experts, and developing tools to make the case for low-emission development (Box 7-3).

TFA 2020—Tropical Forest Alliance (TFA) 2020 is a public–private-sector alliance launched in 2012 by the United States and the Consumer Goods Forum, a business network of more than 400 global retailers and producers from 70 countries with over $3 trillion in annual sales. Other TFA 2020 partners include the Netherlands, Norway, the United Kingdom (UK), Conservation International (CI), the Dutch Sustainable Trade Initiative, and World Resources Institute (WRI). All TFA 2020 partners agree to take voluntary actions to reduce the tropical deforestation associated with global commodities, such as palm oil, soy, beef, and paper and pulp. TFA 2020 is a whole-of-U.S. government effort, engaging a full range of expertise across U.S. government agencies.

The Alliance is open to new government, business, and civil society partners who agree to undertake specific voluntary actions to address commodity-driven tropical deforestation. On July 1, 2013, USAID announced that it will contribute $5.5 million to a new public–private partnership that will mobilize an additional $17.2 million from financial and in-kind contributions for an innovative tropical forest monitoring tool called Global Forest Watch (GFW) 2.0. Partners include WRI, which will develop the tool, as well as Google, the Government of Norway, the University of Maryland, and Staples, among others. GFW 2.0 will support TFA 2020 efforts to reduce commodity-driven tropical deforestation by bringing together satellite imagery and monitoring systems, mobile technology, and multiple overlay maps and tree

Box 7-3 **Enhancing Capacity for Low-Emission Development Strategies**

As an organizing framework for much of its climate change mitigation assistance, the United States supports a cross-cutting objective—building national capacity for low-emission development strategies. During the fast start finance (FSF) period, the United States launched the Enhancing Capacity for Low-Emission Development Strategies (EC-LEDS) program. EC-LEDS supports developing countries' efforts to pursue low-emission, climate-resilient economic development and growth. The program now has official partnerships with more than 20 countries.

The EC-LEDS program supports the development and implementation of country-driven LEDS by providing targeted technical assistance for efforts, such as GHG inventories, economic and emissions modeling and analysis, and landscape and clean energy-related interventions. Going forward, the EC-LEDS program will continue to support partner governments in both the development and the implementation of their LEDS, using a country's own strategy to guide U.S. investments in actionable projects and programs that reduce long-term emission trajectories.

- In Colombia, the United States supported the development of "marginal abatement cost" curves to identify and prioritize emission reduction opportunities in five key sectors—energy, transport, agriculture, housing, and waste. This has led to several specific mitigation opportunities being identified and further developed by Colombian Ministry experts.
- In partnership with the Philippines Climate Change Commission, U.S. experts are supporting the preparation of the next Philippines GHG inventory. This work is enhancing institutional arrangements and coordination around climate change, and resulting in a more robust data collection and archiving system for long-term planning.
- In Bangladesh, the United States is working closely with the government to assess Bangladesh's coastal wind power potential, paving the way for private investment. By delivering high-quality data on wind resource characteristics, the project helps private companies decide whether and where to invest in wind energy.

cover loss alert systems to provide detailed, near-real-time information on tropical forests. USAID will support all aspects of development, including working with developing country partners to ensure they have the capacity to access and use GFW 2.0.

CEM—The Clean Energy Ministerial (CEM) is a high-level global forum to promote policies and programs that advance clean energy technology, share lessons learned and best practices, and encourage the transition to a global clean energy economy. DOE played a crucial role in launching the CEM and hosted the first meeting of ministers in Washington, D.C., in June 2010. There are 23 developed and developing country governments voluntarily participating in the CEM; together they represent 90 percent of global clean energy investment and 80 percent of global GHG emissions.

The CEM is organized around a three-part strategy: high-level policy dialogue, technical cooperation, and engagement with the private sector and other stakeholders. The technical cooperation takes place through 13 wide-ranging initiatives. CEM's low-cost, high-impact technical work facilitates international coordination that amplifies each government's clean energy deployment efforts and helps nations reduce carbon emissions, improve energy security, provide energy access, and sustain economic growth. The United States leads or co-leads eight of those initiatives, including SEAD and Global LEAP.

CERC—In November 2009, President Obama directed DOE and President Hu directed China's Ministry of Science and Technology and National Energy Administration to explore a new model for bilateral cooperation in clean energy research. The U.S.-China Clean Energy Research Center (CERC), launched shortly thereafter, is a $150-million joint R&D program carried out by three U.S. CERC consortia (one each for energy-efficient buildings, clean vehicles, and advanced coal) and their counterparts in China, with 50/50 division of funding costs between the United States and China, and with $75 million provided by private sources (UNEP and WMO 2011).

BREADTH OF SUPPORT AND PRIORITY REGIONS

U.S. climate finance is notable for its geographic breadth: more than 120 countries received U.S. climate finance in the period 2010–2012 across all regions.

The United States prioritizes its assistance to different countries and regions, depending on their relative thematic importance. U.S. clean energy programs prioritize today's major emerging economies and tomorrow's potentially large GHG emitters. U.S. sustainable landscapes programming focuses on globally important tropical forests, such as those in Central Africa, the Amazon, and Southeast Asia. For adaptation assistance, the United States prioritizes its support to the most vulnerable developing countries, such as the least developed countries (LDCs), small-island developing states (SIDS), and Africa, in line with the commitments made in the Copenhagen Accord. In FY 2012, the United States provided nearly 80 percent of its country-specific adaptation funding to LDCs, SIDS, or Africa.

Figure 7-1 shows the regional distribution of U.S. FSF for programs that can be attributed to a particular country or region. (The figure does not include global or multiregional programs.)

New and Additional Climate Finance

International assistance for climate change continues to be a major priority for the United States. The U.S. administration seeks new funding from Congress on an annual basis. Since ratifying the Convention, which is where the term "new and additional" was first used, U.S. international climate finance increased from virtually zero in 1992 to an average of $2.5 billion per year during the FSF period (2010 to 2012). During the FSF period, average annual appropriated climate assistance increased fourfold compared with 2009 funding levels. U.S. climate assistance has increased in the context of an overall increasing foreign assistance budget.

Mobilizing Private Climate Finance

While maintaining a strong core of public climate finance is essential, the United States also recognizes that private finance must play a key role in mitigation and adaptation in developing countries. The reasons are abundant. First, private investors manage resources that dwarf available public resources, and these resources can often be distributed more quickly and efficiently than public-sector resources. Second, because of the scale of the climate problem, public funds alone will never be sufficient to adequately address climate change. Further, more efficient leveraging of private investment can enable the nation to use the available public resources in areas and sectors where the private sector is unlikely to invest enough on its own, particularly in areas like adaptation for the most vulnerable and least developed countries. Finally, a large share of mitigation-related investments can deliver a financial return and, therefore, lend themselves to private investment. As a result, private finance has been and will continue to be the dominant force driving economic growth in most economies. How it is channeled will determine whether that growth is low in carbon and resilient to changes in climate.

Toward that end, the United States is actively working to combine its significant, but finite, public contributions with targeted, smart policies to mobilize maximum private investment in climate-friendly activities in developing countries. The U.S. government is looking to use public funds where they are catalytic—where a targeted and timely injection of public finance creates new markets and opportunities for low-carbon investment that would not otherwise occur. Continuing to execute this vision will be especially important as developed countries, including the United States, work toward a collective goal of mobilizing $100 billion per year in public and private climate finance for developing countries by 2020, in the context of meaningful mitigation actions and transparency on implementation.

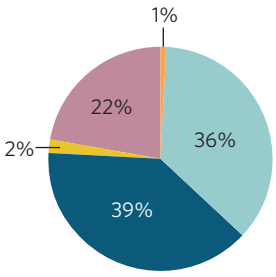
The United States is laying the foundation for larger-scale investments (1) by encouraging OPIC's development finance and Ex-Im Bank's export credit authorities to invest in clean energy technologies and create new products tailored toward climate change solutions; and (2) by leveraging significant private-sector investments across all three pillars through bilateral and multilateral programs. The United States will continue to place special emphasis on working with developing countries to develop strong regulatory frameworks and national policies to attract international capital flows, mobilize domestic flows, and create the right institutional framework for domestic action.

The United States has also been working with its developed country partners to collectively develop and coordinate strategies for scaling up climate-friendly investment in developing countries. In April 2013, the United States held an inaugural meeting of climate ministers and senior officials from development and finance ministries to explore ways to coordinate more

Figure 7-1

Regional Distribution of Country-Specific Congressionally Appropriated Funds for FY 2010–2012

U.S. clean energy programs prioritize today's major emerging economies and tomorrow's potentially large greenhouse gas emitters. U.S. sustainable landscapes programming focuses on globally important tropical forests, such as those in Central Africa, the Amazon, and Southeast Asia. For adaptation, dedicated U.S. climate assistance prioritizes countries, regions, and populations that are highly vulnerable to the impacts of climate change.



Note: Shares of funds depicted here do not include global, multilateral, or multiregional funds, for which country allocations are not currently available.

closely on using public resources and policies to mobilize the maximum amount of total investment in climate action. The developed countries in attendance agreed to focus on strengthening and augmenting key tools that are provided through existing public finance institutions that operate at the nexus with the private sector: development finance institutions, multilateral development banks, key multilateral climate change funds, and export credit agencies. The United States will continue to play an active role internationally to help coordinate this work going forward.

Sample Initiatives: Mobilizing Private Climate Finance

ACEF—Launched in 2012, the Africa Clean Energy Finance (ACEF) Initiative is an example of innovative U.S. government approaches to mobilizing private-sector financial resources to address climate change. ACEF seeks to address sub-Saharan Africa's acute energy needs by mobilizing private investment in clean energy projects, ranging from household-level solar energy to utility-scale power plants. ACEF represents a new way of doing business that harnesses the best of the U.S. government's technical and financial expertise. By combining $20 million in grant-based financing from DOS, project planning expertise from the U.S. Trade and Development Agency, and financing and risk mitigation tools from OPIC, ACEF will catalyze hundreds of millions of dollars in financing from OPIC, which will then leverage hundreds of millions of dollars in private investment. ACEF demonstrates how a very limited amount of grant-based public resources—when surgically applied—can catalyze a much larger pool of finance that can bring climate projects to fruition at scale.

USAID–India Clean Energy—USAID announced in June 2013 that it will facilitate a new private–public investment of $100 million in India's clean energy sector via Nereus Capital, an alternative asset manager investing in industries undergoing transformative change. This investment, announced during the fourth annual U.S.-India Strategic Dialogue, will be mobilized by USAID's Development Credit Authority in partnership with the U.S.-based institutional investor Northern Lights Capital Group.

CTI PFAN—As of the end of 2012, the Climate Technology Initiative Private Financing Advisory Network (CTI PFAN) has successfully mobilized about $300 million in private investment to implement clean energy projects in developing countries. PFAN financial professionals work with project developers and other project proponents to structure the project and develop a business plan, with supporting investor pitch, so that the merits of the project can be presented to the international private financial community with the goal of securing debt and/or equity investment for implementation. In addition, USAID is investing $1 million in the PFAN-Asia program to expand investment in clean energy in developing countries in Asia. Activities will link private-sector financiers with clean energy project developers to increase access to private financing for clean energy. Participating countries are expected to include Cambodia, Indonesia, Laos, Malaysia, Philippines, Thailand, and Vietnam.

OPIC Clean Energy—As a result of making the renewable resources sector an agency-wide priority in 2007, OPIC increased its total clean energy financing from $50 million in 2007 to an average of $663.8 million annually over the period 2010–2012. This support is expected to leverage an estimated $2.7 billion in additional private investment.

Technology Development and Transfer

Since 2009, the United States has engaged in a wide range of activities with developing countries and economies in transition, with the primary goal of promoting the development and deployment of climate-friendly technologies and practices. The United States promotes its technology development and transfer activities bilaterally, plurilaterally, and multilaterally.

At all levels of activity, the principal U.S. focus is to help support the development of the policies and regulations and overall institutional scaffolding that is required to facilitate technology transfer actions. For example, the United States works bilaterally with individual countries on capacity-building activities on appliance efficiency standards, renewable energy policies, and smart-grid regulatory schemes. Plurilaterally, the United States works with other countries on regional initiatives to transform market structures that will expedite the technology flows. Finally, on the multilateral level, the United States contributes to such global technology transfer institutions as the UNFCCC's Technology Executive Committee and Climate Technology Center and Network.

The United States has also worked extensively on the CTI, a multilateral initiative originally established at the first Conference of the Parties to the UNFCCC in 1995 to foster international cooperation for accelerated development and diffusion of climate-friendly technologies and practices. Since July 2003, CTI has been operating under an implementing agreement of the International Energy Agency that includes the United States, Australia, Austria, Canada, Finland, Germany, Japan, Norway, Republic of Korea, Sweden, and the UK. Through a variety of capacity-building activities, CTI has promoted meaningful technology transfer to and among developing countries and countries in transition. Specific activities include technology needs assessments, seminars and symposia, implementation activities, training courses, information dissemination, and support activities. In addition to their current and future environmental benefits, these efforts are promoting near- and long-term global economic and social stability through creation of jobs and associated strengthening of local and regional infrastructure.

For the most part, U.S. assistance is dedicated to "soft" technology transfer, as "soft" technology often needs to be in place before "hard" technology can be installed. However, much of OPIC's and Ex-Im's activities, which do finance hard technologies on the ground, such as wind turbines and solar panels, can be characterized as "hard" technology transfer. Table 7-2 presents specific examples of U.S. involvement in technology development and transfer activities. Please note that this table does not represent an exhaustive list of these activities.

Additionally, several U.S. government agencies have helped U.S.-based companies access international markets, thus providing clean energy and climate-friendly technologies around the world. For example, In FY 2013 the U.S. Department of Commerce (DOC) welcomed delegates from 105 countries to clean energy-focused trade shows in the United States and organized related trade missions to several key markets. Since the launch of the interagency Civil Nuclear Trade Initiative, the Renewable Energy and Energy Efficiency Export Initiative, and the Environmental Exports Initiative, DOC officials have led U.S. climate-friendly technology exporters to China, India, Japan, Indonesia, the Philippines, Mexico, Chile, Brazil, Turkey, Vietnam, the Middle East, and Central/Eastern Europe, with more visits to occur in 2014 and beyond. U.S. government agencies have also played a key role in helping foreign governments establish regulations and incentives that support the deployment of clean energy.

Table 7-2 **Examples of U.S. Technology Development and Transfer Activities**

For the most part, U.S. assistance is dedicated to "soft" technology transfer activities, as "soft" technologies often need to be in place before "hard" technologies can be installed. However, much of OPIC's and Ex-Im's activities, which do finance hard technologies on the ground, such as wind turbines and solar panels, can be characterized as "hard" technology transfer. This table presents specific examples of U.S. involvement in technology development and transfer activities.

Purpose	Description	Recipient	Sector	U.S. Funding	Public or Private Sector	Factors Enabling Project's Success	Technology Transferred	Impact on GHG Emissions/ Sinks
Global Methane Initiative								
Reduce methane emissions and advance the abatement, recovery, and use of methane as a valuable clean energy source.	Focuses on an international network to build capacity, develop strategies and markets, and remove barriers to methane reduction project development in partner countries.	Several hundred global projects and activities.	Agriculture, coal mine methane, municipal solid waste, oil and gas systems, wastewater.	$38.4 million (FY 2009–2012). $74.4 million total since inception in 2005.	Public and private	High-quality emission data, technical capability, availability of financing, policy incentives, valuable use for gas, capacity training.	Best practices/ technologies for evaluating and measuring methane emissions from target sectors; mitigation technologies/ best practices, such as coal mine and landfill methane capture systems, biodigester, and technologies for reducing oil and gas sector methane emissions.	Reduced methane emissions by approximately 23 Tg CO_2e in 2012 alone; cumulative emission reductions exceed 150 Tg CO_2e.

Table 7-2 (Continued) **Examples of U.S. Technology Development and Transfer Activities**

Purpose	Description	Recipient	Sector	U.S. Funding	Public or Private Sector	Factors Enabling Project's Success	Technology Transferred	Impact on GHG Emissions/ Sinks
Super-efficient Equipment and Appliance Deployment (SEAD)								
Advance global market transformation of energy-efficient equipment and appliances.	Provides peer community, research, data, and tools to help turn knowledge into action to accelerate the transition to a clean energy future through effective appliance and equipment energy efficiency programs.	16 governments participate in the SEAD initiative of the Clean Energy Ministerial (CEM). Non-CEM countries engage on a case-by-case basis.	Electricity	$11.45 million (FY 2009–2012).	Public and private	Peer-to-peer exchange among technical and policy experts from participating governments; existence of complementary activities that develop clear, broadly accepted test procedures for products; and collaborating with industry to ensure their participation in promoting a transition to energy-efficient products.	SEAD data and analysis inform regional appliance standards processes, international test procedure harmonization activities, and capacity building for test laboratories.	Employing current best practices in SEAD, economies can by 2030 reduce annual electricity demand by over 2000 billion kilowatt-hours. These measures would decrease CO_2 emissions over the next two decades by 11 billion tons (1,000 Tg CO_2e).
Global Lighting and Energy Access Partnership (Global LEAP)								
Advance global market transformation toward higher-performing, higher-efficiency solar-powered lanterns and direct current (DC)-powered appliances designed for off-grid markets to advance energy access.	Supports quality assurance activities for solar-powered lanterns for off-grid lighting, a global competition in two categories (lights and televisions) to identify the best DC-powered products in the market for use in an off-grid context, and efforts to advance commercially viable mini-grid solutions for rural energy access.	DOE, in coordination with other donor governments and development partners, including Italy, Japan, UK, the World Bank, International Finance Corporation, UNDP, and the UN Foundation. Global LEAP is a CEM initiative.	Off-grid electricity	$2.15 million (FY 2009–2012).	Public and private	Close coordination and collaboration with World Bank group partners to leverage comparative strengths; strong stakeholder engagement efforts; market analysis to select appropriate products for competition; broadly accepted test procedures; collaboration to give off-grid customers greater choice and information about available products.	Over 40 solar-powered lighting devices have been certified through the Global LEAP-supported quality assurance framework, used by the World Bank Group's Lighting Africa program, and now adopted by the IEC, an international standards-setting body. The Global LEAP competitions identify the top DC-powered televisions and DC-powered light-emitting diode (LED) lights (used with off-grid solar home systems); winners to be announced in spring 2014.	An estimated 138,600 metric tons of CO_2e (0.1386 Tg CO_2e) have been avoided. The climate benefits are even more significant when the black carbon implications of kerosene lighting are considered.

Table 7-2 (Continued) **Examples of U.S. Technology Development and Transfer Activities**

Purpose	Description	Recipient	Sector	U.S. Funding	Public or Private Sector	Factors Enabling Project's Success	Technology Transferred	Impact on GHG Emissions/ Sinks
SERVIR								
Increased capacity to utilize geospatial information.	USAID and NASA collaboration to build capacity of regional institutions in developing countries to improve environmental management and climate change resilience through the application of geospatial information in decision making.	Regional Center for Mapping Resources for Development and member country governments in East Africa, International Center for Integrated Mountain Development and member country governments in the Himalaya Hindu-Kush Region, Water Center for the Humid Tropics of Latin America and the Caribbean, and member country governments in Central America.	Water, agriculture, energy, land cover, climate, disasters, biodiversity.	$41.7 million over FY 2010–2013.	Public	Science backstopping from NASA, user engagement support from USAID, partnership with regional institutions.	Geographic information system (GIS), remote sensing, land cover classification, hydrologic modeling.	Decision support will aid land and forest management, monitoring, emission estimations, and policy improvement leading to emission reductions.
Famine Early Warning System Network (FEWS NET)								
Establish more effective, sustainable networks that reduce vulnerability to food insecurity.	Assesses short- to long-term vulnerability to food insecurity with environmental information from satellites and agricultural and socio-economic information from field representatives. Conducts vulnerability assessments and contingency and response planning, aimed at strengthening host country food security networks.	Afghanistan, Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Guatemala, Haiti, Honduras, Kenya, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Rwanda, Somalia, Sudan, Uganda, Zambia, Zimbabwe.	Adaptation	Average $13 million per year.	Public	The combined U.S. environ-mental monitoring expertise of NASA, NOAA, and USGS; implementation by host country field staff.	Information networks: remote sensing, data acquisition, processing, and analysis; GIS analytical skills. Equipment to facilitate adaptation: GIS hardware and software.	N/A

Table 7-2 (Continued) **Examples of U.S. Technology Development and Transfer Activities**

Purpose	Description	Recipient	Sector	U.S. Funding	Public or Private Sector	Factors Enabling Project's Success	Technology Transferred	Impact on GHG Emissions/ Sinks
SilvaCarbon								
Build capacity and provide tools for improved measurement and monitoring of forest carbon.	A multi-agency U.S. government effort to improve developing country capacity for forest and other terrestrial carbon measurement and monitoring, through coordinated support for tool and methodology development and training to use appropriate methods for building and implementing forest carbon monitoring systems.	Bilateral programs with the governments of Colombia, Peru, Ecuador, Vietnam, and Gabon. Regional training activities in South and Central America, Congo Basin, and Southeast Asia.	Forests and other sectors impacting land use, including agriculture watershed management, protected areas.	Approximately $20 million (FY 2010–2012).	Public	Focus on agency coordination and very close coordination with recipient country government technical agencies.	Remote sensing, geospatial analysis methods, forest inventory design, and field collection tools.	Providing countries with improved capacity to measure and report on current carbon stocks and emissions and use information together with other natural resource management data to reduce emissions from future deforestation.

Notes: This table does not represent an exhaustive list of these activities. CO_2e = carbon dioxide equivalent; DOE = United States Department of Energy; FY = fiscal year; N/A = not applicable; NASA = National Aeronautics and Space Administration; NOAA = National Oceanic and Atmospheric Administration; Tg = teragram; UNDP = United Nations Development Programme; USAID = United States Agency for International Development; USGS = United States Geological Survey.

Table 7-3 **U.S. Financial Contributions to the Global Environment Facility for Climate Change Activities** (in US$ millions)

During fiscal years 2010–2012, the United States allocated $149 million for Global Environment Facility programs related to climate change.

Multilateral Institution	2010	2011	2012
Global Environment Facility	44	45	60

Table 7-4 **Annual U.S. Financial Contributions to Multilateral Institutions** (in US$ millions)

The U.S. government provides direct funding to multilateral institutions and programs in support of sustainable economic development and poverty alleviation. Although in many cases a portion of this funding supports climate change activities, in almost all cases it is not currently possible to identify that amount. Therefore, this table represents total U.S. government contributions to these multilateral development institutions and funds, including amounts not directly attributable to climate change activities.

Institutions, Funds, and Programs	2010	2011	2012
Poverty Reduction and Economic Growth (Multilateral Development Banks)			
International Bank for Reconstruction and Development	–	–	117.36
International Development Association	1,262.50	1,352.53	1,325.00
Inter-American Development Bank	204.00	-	81.20
Enterprise for the America Multilateral Investment Fund	25.00	24.95	25.00
Inter-American Investment Corporation	4.67	20.96	4.66
Asian Development Bank	–	211.37	106.59
Asian Development Fund	–	–	100.00
African Development Bank	–	–	32.42
African Development Fund	155.00	65.83	223.95
Multilateral Debt Relief for International Development Association	–	–	167.00
Multilateral Debt Relief for African Development Fund	–	–	7.50
Food Security			
Global Agriculture and Food Security Program	66.60	99.80	160.00
International Fund for Agricultural Development	30.00	37.44	30.00
Environmental Trust Funds			
Clean Technology Fund	300.00	184.63	229.63
Forest Investment Program	20.00	30.00	37.50
Pilot Program for Climate Resilience	55.00	10.00	18.70
Scaling-Up Renewable Energy Program in Low-Income Countries	–	10.00	18.70
Global Environment Facility[c]	86.50	89.82	119.82
Least Developed Countries Fund	30.0	25.0	25.0
Special Climate Change Fund	20.0	10.0	10.0
Forest Carbon Partnership Facility	10.0	8.0	–
Partnership for Market Readiness	5.0	–	2.5
Other Multilateral Institutions, Funds, and Programs			
United Nations Development Programme[b]	100.50	84.78	82.00
United Nations Environment Programme[a, b]	11.50	7.70	7.70
OAS Development Assistance Programs[a, b]	5.00	4.75	3.50
UN Women[b, d]	9.00	6.00	7.50
World Trade Organization Technical Assistance[a, b]	1.05	1.20	1.15
International Civil Aviation Organization[a, b]	0.95	0.95	0.95
Montreal Protocol Multilateral Fund[b]	35.30	35.50	36.45
Intergovernmental Panel on Climate Change/UNFCCC[b]	13.00	10.00	10.00
International Contributions for Scientific, Educational, and Cultural Activities[a, b]	1.00	1.85	–
World Meteorological Organization Voluntary Co-operation Programme[a, b]	2.05	2.09	2.09
UN Human Settlements Program (UN HABITAT)[b]	2.05	2.00	1.90

[a] These international organizations also receive assessed contributions through the Contributions to International Organizations account.
[b] Voluntary contributions from International Organizations and Programs account.
[c] These numbers reflect fiscal year funding—i.e. "2005" funding is FY 2005 funding. The U.S. fiscal year begins October 1st of the preceding year and ends on September 30th.
[d] 2010 was the last year there was a breakout between the UN Development Fund for Women ($6 million) and UNIFEM Trust Fund ($3 million) accounts. For 2011 and 2012, the line items were merged.

Note: OAS = Organization of American States; UN = United Nations; UNFCCC = United Nations Framework Convention on Climate Change; UNIFEM = United Nations Development Fund for Women.

Table 7-5 **2010 Bilateral and Regional Contributions Related to the Implementation of the UNFCCC** (in US$ millions)

Fiscal year 2010 bilateral and regional contributions related to the implementation of the United Nations Framework Convention on Climate Change amounted to almost $2,000 million. This includes grant-based assistance, development finance, and export credit. In the case of grant-based assistance, some funding covers multiple countries and/or regions. As a result of enhanced data collection methodologies and improvements made to data collection over time, some data in this table may vary slightly from data reported separately.

Recipient Country/Region	Energy	Forestry and Agriculture	Adaptation	Total
Grant-Based Assistance	**915.3**	**242.4**	**430.3**	**1,587.9**
Multiple Regions, Multiple Countries	467.9	120.1	301.1	889.4
Africa				
Africa—Multiple Countries	9.6	15.9	12.0	37.5
Angola	0.0	0.0	0.4	0.4
Democratic Republic of the Congo	2.3	7.9	0.3	10.4
Ethiopia	0.0	0.0	5.0	5.0
Ghana	1.0	0.0	0.0	1.0
Kenya	1.5	1.0	4.2	6.7
Liberia	1.0	0.4	0.0	1.4
Malawi	138.8	2.0	0.0	140.8
Mali	0.0	0.2	2.0	2.2
Mozambique	2.0	1.0	1.5	4.5
Nigeria	1.5	0.0	0.0	1.5
Rwanda	0.0	0.0	2.3	2.3
Senegal	0.0	1.5	0.0	1.5
Tanzania	0.0	3.3	2.2	5.5
Uganda	1.5	1.5	0.0	3.0
Zambia	0.0	1.5	0.0	1.5
No regional total is provided because "multiple region" funds also go to this region.				
Asia				
Asia—Multiple Countries	12.0	9.3	22.4	43.7
Afghanistan	48.6	0.0	0.0	48.6
Bangladesh	0.0	0.0	3.0	3.0
Cambodia	0.0	3.0	1.0	4.0
China	2.0	0.0	0.0	2.0
India	11.3	5.0	4.0	20.3
Indonesia	5.0	17.5	0.0	22.5
Kazakhstan	0.4	0.0	0.0	0.4
Kyrgyzstan	1.5	0.0	0.0	1.5
Maldives	0.0	0.0	3.0	3.0
Marshall Islands	0.0	0.0	0.0	0.1
Mongolia	48.7	0.0	0.0	48.7
Nepal	0.0	0.0	3.0	3.0
Pakistan	63.8	0.0	0.0	63.8
Philippines	4.0	0.0	0.3	4.3
Tajikistan	0.9	0.0	0.0	0.9
No regional total is provided because "multiple region" funds also go to this region.				
Europe & Eurasia				
Albania	0.0	0.0	1.5	1.5

Table 7-5 (Continued) **2010 Bilateral and Regional Contributions Related to the Implementation of the UNFCCC**
(in US$ millions)

Recipient Country/Region	Energy	Forestry and Agriculture	Adaptation	Total
Armenia	1.3	0.0	0.0	1.3
Georgia	2.4	0.0	0.0	2.4
Macedonia	2.0	0.0	0.0	2.0
Moldova	2.0	0.0	2.0	4.0
Ukraine	5.0	0.0	0.0	5.0
No regional total is provided because "multiple region" funds also go to this region.				
Latin America & Caribbean				
Latin America & Caribbean—Multiple Countries	16.0	28.0	10.3	54.3
Brazil	1.0	6.0	0.0	7.0
Colombia	2.0	1.3	0.0	3.3
Dominican Republic	0.0	0.0	2.0	2.0
Ecuador	0.0	1.0	1.4	2.4
El Salvador	0.0	1.0	0.0	1.0
Guatemala	0.0	3.0	1.4	4.4
Guyana	0.0	1.0	0.0	1.0
Haiti	43.0	0.0	3.0	46.0
Jamaica	0.0	0.0	1.0	1.0
Mexico	2.2	3.0	0.0	5.2
Panama	0.0	2.5	0.0	2.5
Peru	0.0	4.5	0.0	4.5
No regional total is provided because "multiple region" funds also go to this region.				
Middle East				
Jordan	12.8	0.0	0.0	12.8
Other Operating Units	0.0	0.0	40.0	40.0
No regional total is provided because "multiple region" funds also go to this region.				
Development Finance	**155.1**	**0.0**	**0.0**	**155.1**
Afghanistan	7.6	0.0	0.0	7.6
India	35.4	0.0	0.0	35.4
Mexico	20.3	0.0	0.0	20.3
Nigeria	69.8	0.0	0.0	69.8
Ukraine	22.0	0.0	0.0	22.0
Export Credit	**253.2**	**0.0**	**0.0**	**253.2**
Chile	0.0	0.0	0.0	0.0
Honduras	158.6	0.0	0.0	158.6
India	6.0	0.0	0.0	6.0
Jamaica	0.1	0.0	0.0	0.1
Kenya	6.8	0.0	0.0	6.8
Mexico	81.2	0.0	0.0	81.2
South Africa	0.4	0.0	0.0	0.4
4 countries <$500,000 (Bangladesh, Chile, Namibia, Uganda)	0.1	0.0	0.0	0.1
COMBINED TOTAL	**1,323.5**	**242.4**	**430.3**	**1,996.2**

Table 7-6 **2011 Bilateral and Regional Contributions Related to the Implementation of the UNFCCC** (in US$ millions)

Fiscal year 2011 bilateral and regional contributions related to the implementation of the United Nations Framework Convention on Climate Change amounted to $3,137.6 million. This includes grant-based assistance, development finance, and export credit. In the case of grant-based assistance, some funding covers multiple countries and/or regions.

Recipient Country/Region	Energy	Forestry and Agriculture	Adaptation	Total
Grant-Based Assistance	**962.4**	**361.5**	**560.2**	**1,884.1**
Multiple Regions, Multiple Countries	332.6	132.8	351.7	817.1
Africa				
Africa—Multiple Countries	12.6	26.2	13.9	52.6
Ethiopia	0.0	7.0	16.1	23.1
Ghana	0.6	4.0	0.0	4.6
Kenya	4.6	0.1	5.4	10.0
Malawi	141.1	5.9	3.0	150.0
Mali	0.0	0.0	3.0	3.0
Mozambique	0.0	0.0	4.0	4.0
Nigeria	2.8	0.0	3.5	6.3
Rwanda	0.0	1.0	4.8	5.8
Senegal	0.0	0.0	3.0	3.0
South Africa	4.9	0.0	0.0	4.9
Tanzania	0.0	0.7	3.2	3.9
Uganda	0.0	0.0	3.0	3.0
Zambia	0.0	5.0	0.8	5.8
No regional total is provided because "multiple region" funds also go to this region.				
Asia				
Asia—Multiple Countries	15.2	13.4	20.6	49.1
Afghanistan	73.5	0.0	0.0	73.5
Bangladesh	0.0	0.0	20.1	20.1
Cambodia	0.0	5.0	2.0	7.0
China	3.8	0.0	0.0	3.8
India	7.5	4.0	3.4	14.9
Indonesia	266.8	83.9	10.2	360.9
Kyrgyz Republic	0.3	0.0	0.0	0.3
Maldives	0.0	0.0	3.0	3.0
Nepal	0.0	3.0	4.4	7.4
Pakistan	42.0	0.0	0.0	42.0
Philippines	5.6	3.0	4.0	12.6
Tajikistan	0.6	0.0	0.0	0.6
Timor-Leste	0.0	0.0	3.0	3.0
Vietnam	4.0	4.0	3.0	11.0
No regional total is provided because "multiple region" funds also go to this region.				
Europe & Eurasia				
Europe & Eurasia—Multiple Countries	9.1	1.0	1.0	11.1
Albania	0.4	0.0	0.0	0.4
Armenia	0.4	0.0	1.1	1.5
Bosnia and Herzegovina	0.8	0.0	0.0	0.8
Georgia	2.0	0.5	1.0	3.5
Macedonia	0.5	0.0	0.0	0.5
Moldova	0.3	0.0	0.0	0.3
Ukraine	6.0	0.0	0.0	6.0
No regional total is provided because "multiple region" funds also go to this region.				

Table 7-6 (Continued) **2011 Bilateral and Regional Contributions Related to the Implementation of the UNFCCC** (in US$ millions)

Recipient Country/Region	Energy	Forestry and Agriculture	Adaptation	Total
Latin America & Caribbean				
Latin America & Caribbean—Multiple Countries	5.0	17.4	9.3	31.7
Barbados	0.0	0.0	2.3	2.3
Bolivia	0.0	0.9	0.0	0.9
Brazil	4.2	3.8	0.0	8.0
Chile	0.2	0.0	0.0	0.2
Colombia	4.5	2.0	2.0	8.5
Dominican Republic	0.0	0.0	3.0	3.0
Ecuador	0.0	5.9	0.0	5.9
El Salvador	0.3	0.0	0.1	0.4
Guatemala	0.0	7.1	3.5	10.6
Haiti	1.8	0.0	1.5	3.3
Honduras	0.0	2.0	0.0	2.0
Jamaica	0.0	0.0	3.0	3.0
Mexico	6.2	8.0	0.0	14.2
Peru	0.0	14.0	2.0	16.0
No regional total is provided because "multiple region" funds also go to this region.				
Middle East				
Egypt	0.5	0.0	0.0	0.5
Morocco	1.8	0.0	2.5	4.3
Other Operating Units	0.0	0.0	39.0	39.0
No regional total is provided because "multiple region" funds also go to this region.				
Development Finance	**1,113.9**	**0.9**	**0.0**	**1,114.8**
Multiple countries	50.0	0.0	0.0	50.0
Cambodia	0.0	0.9	0.0	0.9
Georgia	58.0	0.0	0.0	58.0
India	213.8	0.0	0.0	213.8
Jordan	3.0	0.0	0.0	3.0
Kenya	310.0	0.0	0.0	310.0
Liberia	90.0	0.0	0.0	90.0
Peru	123.0	0.0	0.0	123.0
St. Kitts and Nevis	16.1	0.0	0.0	16.1
Thailand	250.0	0.0	0.0	250.0
Export Credit	**194.7**	**0.0**	**0.0**	**194.7**
Multiple Regions, Multiple Countries	5.0	0.0	0.0	5.0
Brazil	0.1	0.0	0.0	0.1
Chile	2.2	0.0	0.0	2.2
Guatemala	4.6	0.0	0.0	4.6
India	180.0	0.0	0.0	180.0
Jamaica	0.4	0.0	0.0	0.4
Mexico	2.3	0.0	0.0	2.3
Namibia	0.1	0.0	0.0	0.1
COMBINED TOTAL	**2,271.0**	**362.4**	**560.2**	**3,193.6**

Table 7-7 **2012 Bilateral and Regional Contributions Related to the Implementation of the UNFCCC** (in US$ millions)

Fiscal year 2012 bilateral and regional contributions related to the implementation of the United Nations Framework Convention on Climate Change amounted to $2,278.0 million. This includes grant-based assistance, development finance, and export credit. In the case of grant-based assistance, some funding covers multiple countries and/or regions.

Recipient Country/Region	Energy	Forestry and Agriculture	Adaptation	Total
Grant-Based Assistance	**585.9**	**277.5**	**398.2**	**1,261.7**
Multiple Regions, Multiple Countries	382.7	141.0	180.4	704.1
Africa				
Africa—Multiple Countries	11.7	17.2	16.9	45.7
Burkina Faso	1.8	0.0	0.0	1.8
Cape Verde	0.0	0.0	41.0	41.0
Democratic Republic of the Congo	0.0	2.2	0.0	2.2
Ethiopia	0.0	0.0	22.9	22.9
Gabon	0.0	0.2	0.0	0.2
Kenya	4.0	1.0	3.5	8.5
Liberia	5.5	4.4	1.8	11.7
Malawi	0.0	3.0	5.0	8.0
Mozambique	0.0	0.0	4.7	4.7
Nigeria	3.4	0.0	1.7	5.1
Rwanda	0.0	0.0	3.5	3.5
Senegal	0.0	0.0	2.0	2.0
South Africa	3.1	0.0	0.0	3.1
Tanzania	0.0	0.2	5.9	6.1
Uganda	0.0	0.0	3.0	3.0
Zambia	0.0	5.0	0.8	5.8
No regional total is provided because "multiple region" funds also go to this region.				
Asia				
Asia—Multiple Countries	5.4	8.5	17.6	31.5
Afghanistan	79.6	0.0	0.0	79.6
Bangladesh	4.5	2.0	9.0	15.5
Cambodia	0.0	3.6	4.0	7.5
China	2.2	0.0	0.0	2.2
India	4.6	4.0	2.0	10.6
Indonesia	3.0	8.4	4.1	15.6
Kazakhstan	2.0	0.0	0.0	2.0
Kyrgyz Republic	0.7	0.0	0.0	0.7
Maldives	0.0	0.0	2.0	2.0
Nepal	0.0	4.5	4.8	9.3
Pakistan	31.8	0.0	0.0	31.8
Papua New Guinea	0.0	2.0	0.0	2.0
Philippines	3.0	5.8	2.8	11.6
Timor-Leste	0.0	0.0	2.0	2.0
Vietnam	2.0	1.9	3.0	6.9
No regional total is provided because "multiple region" funds also go to this region.				

Table 7-7 (Continued) **2012 Bilateral and Regional Contributions Related to the Implementation of the UNFCCC** (in US$ millions)

Recipient Country/Region	Energy	Forestry and Agriculture	Adaptation	Total
Europe & Eurasia				
Europe & Eurasia—Multiple Countries	3.4	0.0	0.0	3.4
Albania	0.4	0.0	0.0	0.4
Armenia	1.6	0.0	0.0	1.6
Bosnia and Herzegovina	0.6	0.0	0.0	0.6
Georgia	4.0	0.8	0.1	4.8
Macedonia	0.8	0.0	0.2	1.0
Ukraine	7.1	0.0	0.0	7.1
No regional total is provided because "multiple region" funds also go to this region.				
Latin America & Caribbean				
Latin America & Caribbean—Multiple Countries	6.4	18.0	7.0	31.4
Barbados	0.0	0.0	1.5	1.5
Brazil	0.0	8.7	0.0	8.7
Colombia	4.0	4.5	3.0	11.5
Dominican Republic	0.0	0.0	3.0	3.0
Ecuador	0.0	2.8	2.0	4.8
El Salvador	0.7	0.0	0.1	0.8
Guatemala	0.0	4.5	3.1	7.6
Haiti	0.0	0.0	3.5	3.5
Honduras	0.1	1.3	4.0	5.3
Jamaica	0.0	1.0	2.0	3.0
Mexico	5.4	10.4	0.0	15.8
Peru	0.0	10.7	2.6	13.4
No regional total is provided because "multiple region" funds also go to this region.				
Middle East				
Jordan	0.5	0.0	0.0	0.5
Morocco	0.7	0.0	0.0	0.7
Other Operating Units	0.0	0.0	22.0	22.0
No regional total is provided because "multiple region" funds also go to this region.				
Development Finance	**721.6**	**0.0**	**0.0**	**721.6**
India	261.9	0.0	0.0	261.9
Pakistan	16.7	0.0	0.0	16.7
Peru	193.0	0.0	0.0	193.0
South Africa	250.0	0.0	0.0	250.0
Export Credit	**301.2**	**0.0**	**0.0**	**301.2**
Multiple Regions, Multiple Countries	11.5	0.0	0.0	11.5
Barbados	6.4	0.0	0.0	6.4
Brazil	80.7	0.0	0.0	80.7
India	201.6	0.0	0.0	201.6
Mexico	1.0	0.0	0.0	1.0
COMBINED TOTAL	**1,608.7**	**277.5**	**398.2**	**2,284.5**